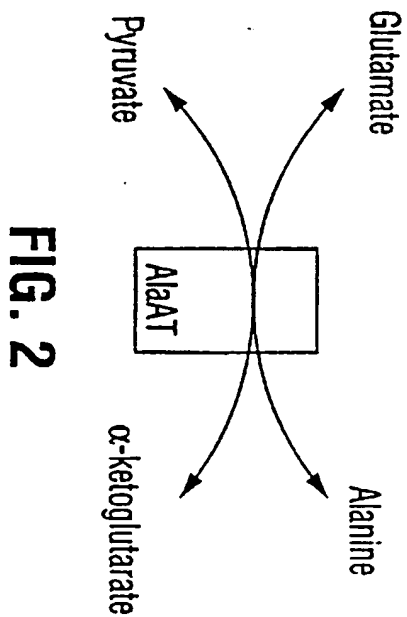


FIG. 1



Title: ROOT SPECIFIC, AND STRESS-INDUCED
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GTGACCTGCAGGTCAACGGATCCTAATCGGGTATATCCGACCCGGAAAAGAAACGTAGCACGTTG
-250
ACAAAACTTCATATGATCCGAGTGAATCAAGCCAAAGGGGATGACACAAAGCTCAGCTTTCGTTT
-180
CGGTCCAATCGCTGTTCCACTTACTTACAAGTCGTACACGTCCTCTCTCTCTCTCTCTCTCACTC
-110
ACTTCCTCTTATAAAGACTCTCTGATCAAAAGTATAATCGGAAACTCCATTCTTTGATACCATCGATTA
-40
TACTAAGAGAGGTGATGATCTTTAATCACTGTTGATATCCTTAACTTTGATCCATTTACTCTGTTCA
31
ATCATTTTGTAGAG

FIG. 3

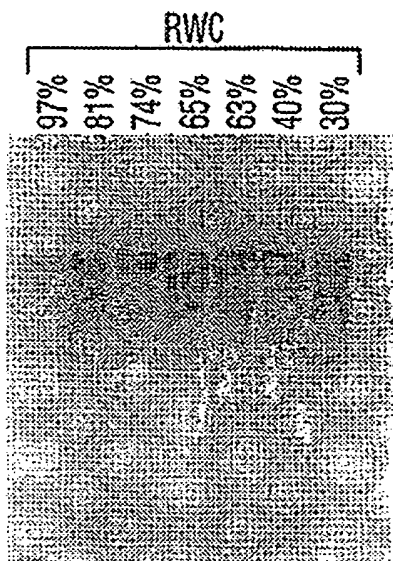


FIG. 4A

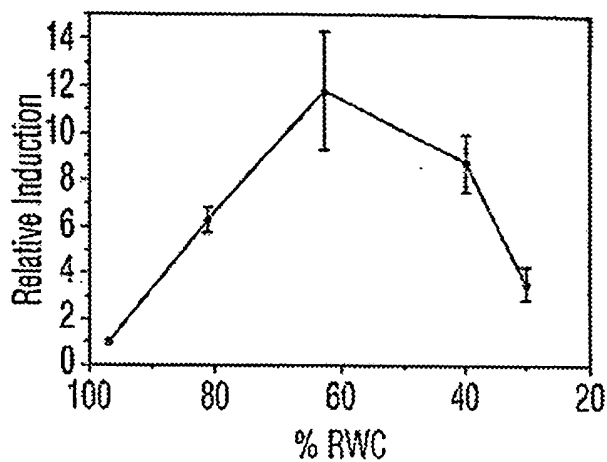


FIG. 4B



FIG. 4C

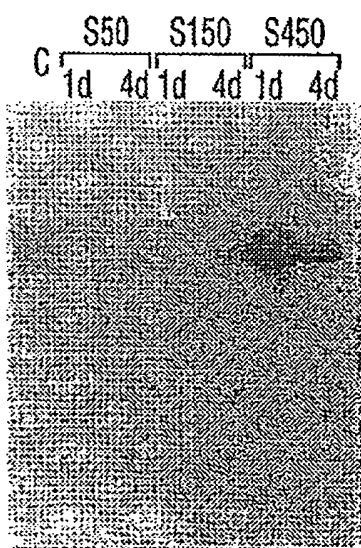


FIG. 4D

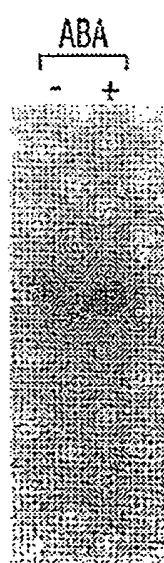


FIG. 4E



GGCCACAAAACCGGGAAGATAGACGACAGCTAGAGCGCTGGGAAGATACTCGTCTGCTGCGCCCGCTTCTGCTTAGTTGATCTCGCC 94
ATGCTGCCACCGTGGCGGTGGACAACCTGAACCCCAAGTTTAATGTGATGATGCTGCGTGGAGAGATTGCATCATGCTCAGCGCTTG 190
M A A T V A V D N L N P K V L K C E Y A V R G E I V I H A Q R L 32
CAGAACAGCTAAGACTCAACCAAGGCTCTTACCTTTGATGAGATCCTCTATTGTAACTTGGAAACCAATCTCTTGGTCAAGCAACGATT 286
Q E Q L K T Q P G S L P F D E I L Y C N I G N P Q S L G Q Q P V 64
ACATCTTCAAGGAGTCTTGGCTTGTGATCATCCAGACCTGTGCAAGAGAGAAATCAACATTGTTCAAGTCTGATTTCTCGA 382
T F F R E V L A L C D H P D L L Q R E E I K T L F S A D S I S R 96
GCAAGACAGATTCTTCCATGATACCTGGAAGACCAAGAGCATACAGCCATAGCCAGGATTAAGGACTTCTGATGCAATTGCTTCTGGG 478
A K Q I L A M I P G R A T G A Y S H S Q G I K G L R D A I A S G 128
ATCGCTTCAAGAGATGATTCCTGCTAATGCTGATGACATTCTTCTACAGATGAGCAAGTCTGGGTCACCTGATGATGCAATTACTGATA 574
I A S R D G F P A N A D D I F L T D G A S P G V H L M M Q L L I 160
AGGAATGAGAAAGATGCTTCTTGTCCGATTCCTCAGTACCCCTTGTACTCGGCTTCCATAGCTCTTCATGGCGGAGCTTGTGCCATACTAT 670
R N E K D G I L V P I P Q Y P L Y S A S I A L H G G A L V P Y Y 192
CTCAATGAATCGACGGGCTGGGGTTGGAACTCTGATGTTAAGAACCACTGAAGATGCTCGGTCAAGAGGCAATCAACGTTAAGGCTTGGTG 766
L N E S T G W G L E T S D V K K Q L E D A R S R G I N V R A L V 224
GTATCAATCCAGAAATCCAATCGACAGTACTTGTGAAGAAACCAATATGACATAGTGAAGTTCTGCAAAAATGAGGCTTGTCTTCTA 862
V I N P G N P T G Q V L A E E N Q Y D I V K F C K N E G L V L L 256
GCTGATGAGTATACCAAGAGACATCTATGTTGACAACAAGAAATTCACCTCTTCAAGAGATAGTGAGATCCTTGGGATACGGCGAGAGGAT 958
A D E V Y Q E N I Y V D N K K F H S F K K I V R S L G Y G E E D 288

FIG. 5



CTCCCTTAGTATCATATCAATCTGTTTCTAAGGATATTATGTAGTGTGTAAGAAGGTGTTACTTTGAGATTACTGGCTTCAGTCTCCA 1054
L P L V S Y Q S V S K G Y, Y G E C G K R G G Y F E I T G F S A P 320
GTAGAGACGATCTACAAATAGCATCAGTGAACCTATGCTCCAATATCACTGGCCAGATCCTTGTAGTCTTGTGATGAAACCAAGGCT 1150
V R E Q I Y K I A S V N L C S N I T G Q I L A S L V M N P P K A 352
AGTATGATCATACGCTTCATACAGGCAAAAAGATGGAATCCTCGCATCTTTAGTCTGTGCGAAGGCATTGGAGCATGCAATCAATAAA 1246
S D E S Y A S Y K A E K D G I L A S L A R R A K A L E H A F N K 384
CTTGAGGGAATTACTTGCAAGAGGCTGAAGGCAATGTAGTGTCCCTCAATCTGTCTGCCACAGAAAGCAATTGAGGCTGCTAAAGCTGCT 1342
L E G I T C N E A E G A M Y V F P Q I C L P Q K A I E A A K A A 416
AACAAAGCACTGATGCATTCTATGCTCTTGGTCTCCTCGAGTGAATCGTGTGTCCTGATCAGGATTTGGCCAGTTCTCTGGCACA 1438
N K A P D A F Y A L R L L E S T G I V V P G S G F G Q V P G T 448
TGGCACTTCAGGTGACGATCCTCCGAGAGGATTAAGATCCCGCAGTCATCTCCGCTTCACGGTTCATGAGGCGTTCAATGTCAGAGTAT 1534
W H F R C T I L P Q E D K I P A V I S R F T V F H E A F M S E Y 480
CGTGACTAACTGGTGCAACATGTGGATTACATACAACCTCATGGGGTTTGTGAGGCGTTCTTGTTGCCCCCCCCCTTCTCTCTC 1630
R D 482
TCTCTCTGACAGCATCTCTCTAGATGAGCAAAATAAAGCAAGCCATGTCATTCCTTAAAAAAAA 1701

FIG.5 Cont'd



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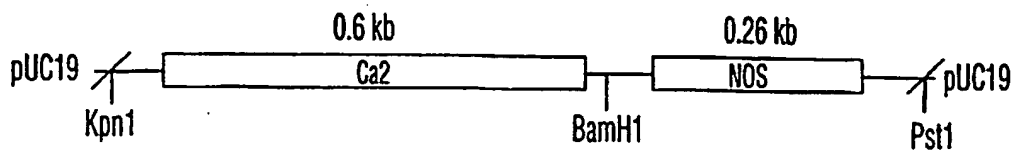


FIG. 6

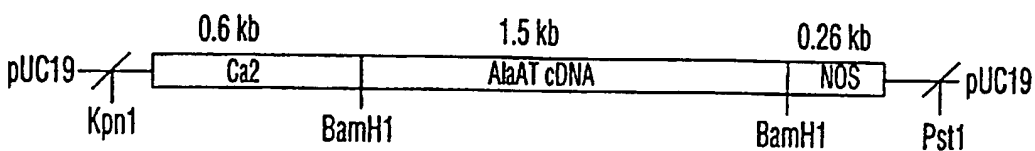


FIG. 7A

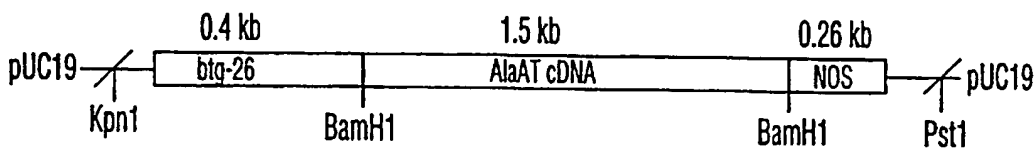


FIG. 7B

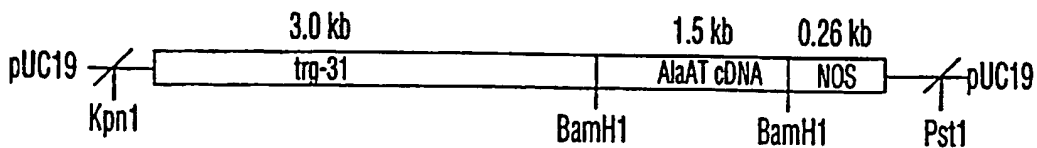


FIG. 7C

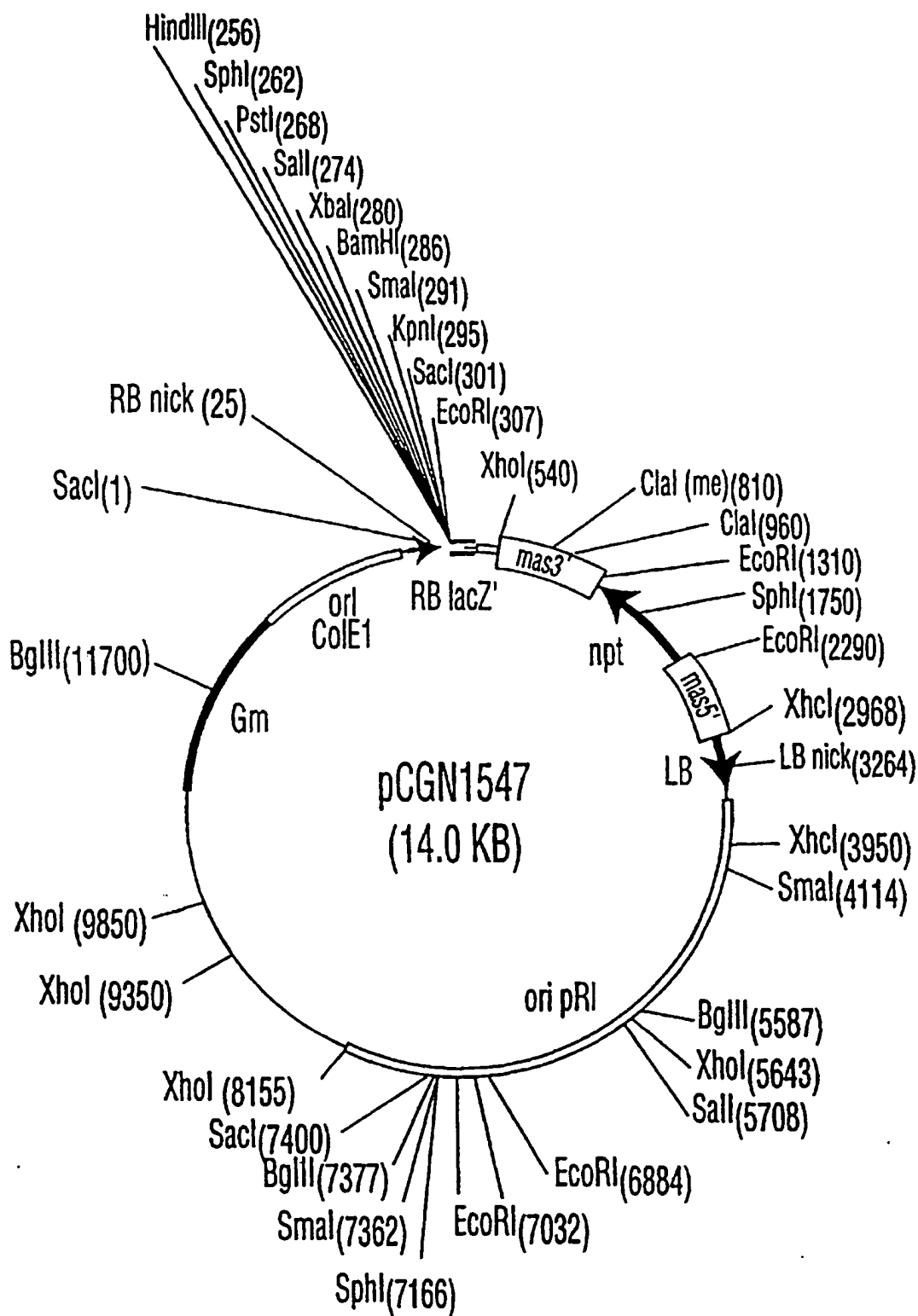


FIG. 8



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Inventor: Allen G. GOOD
Application No.: 09/493,803

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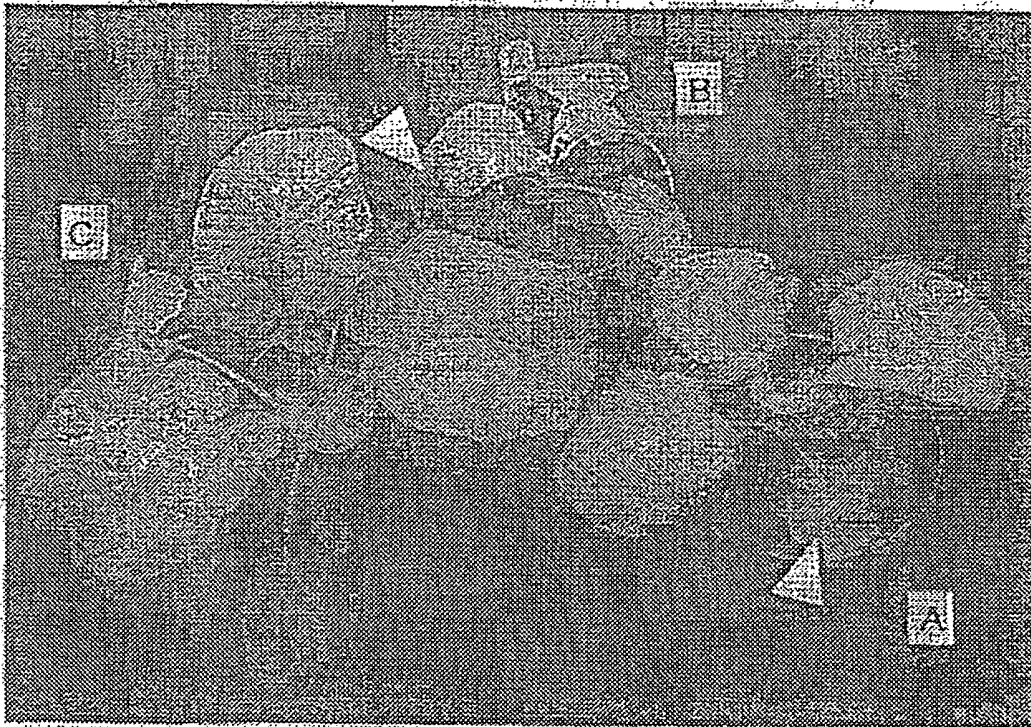


FIG. 9

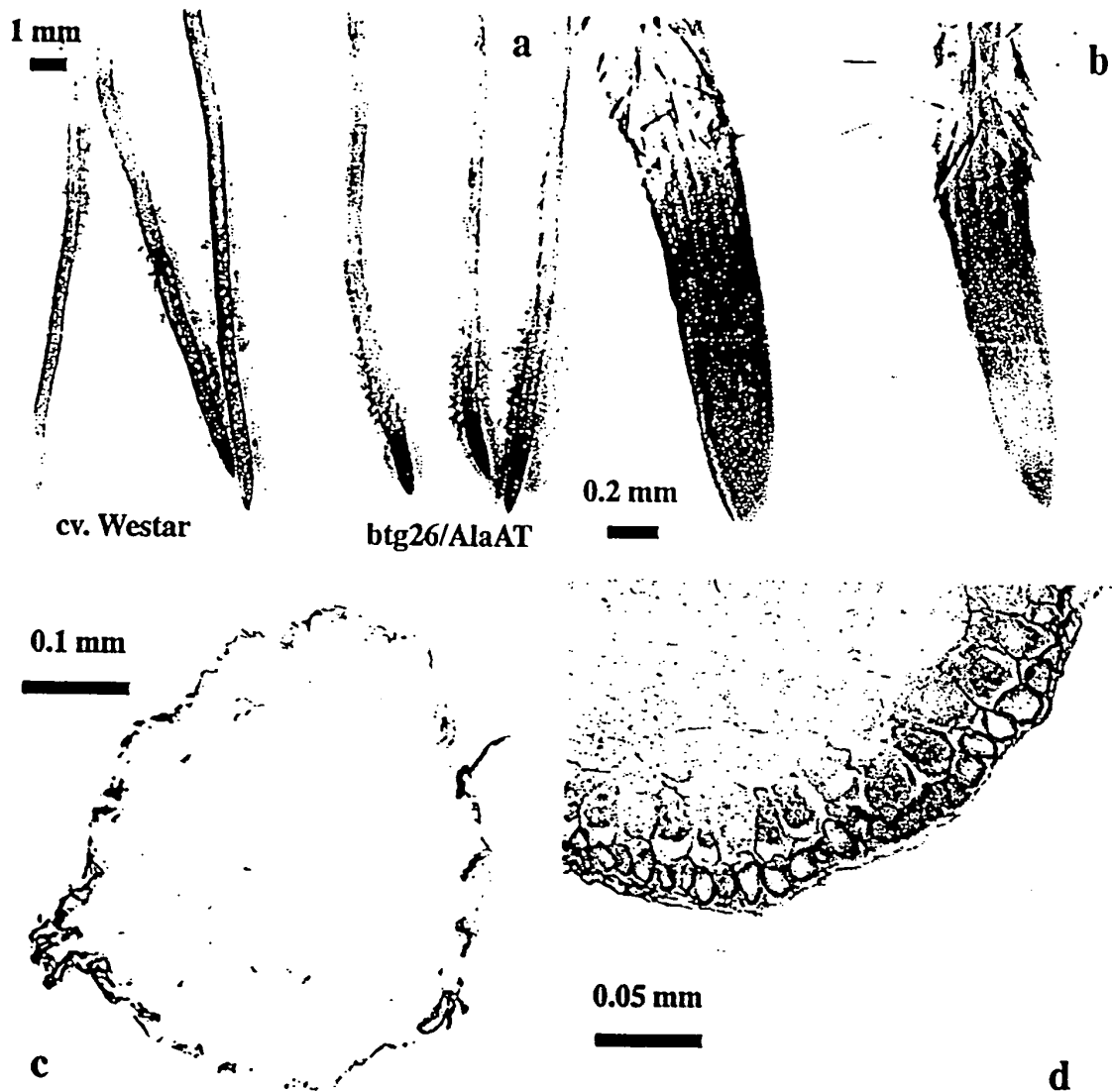
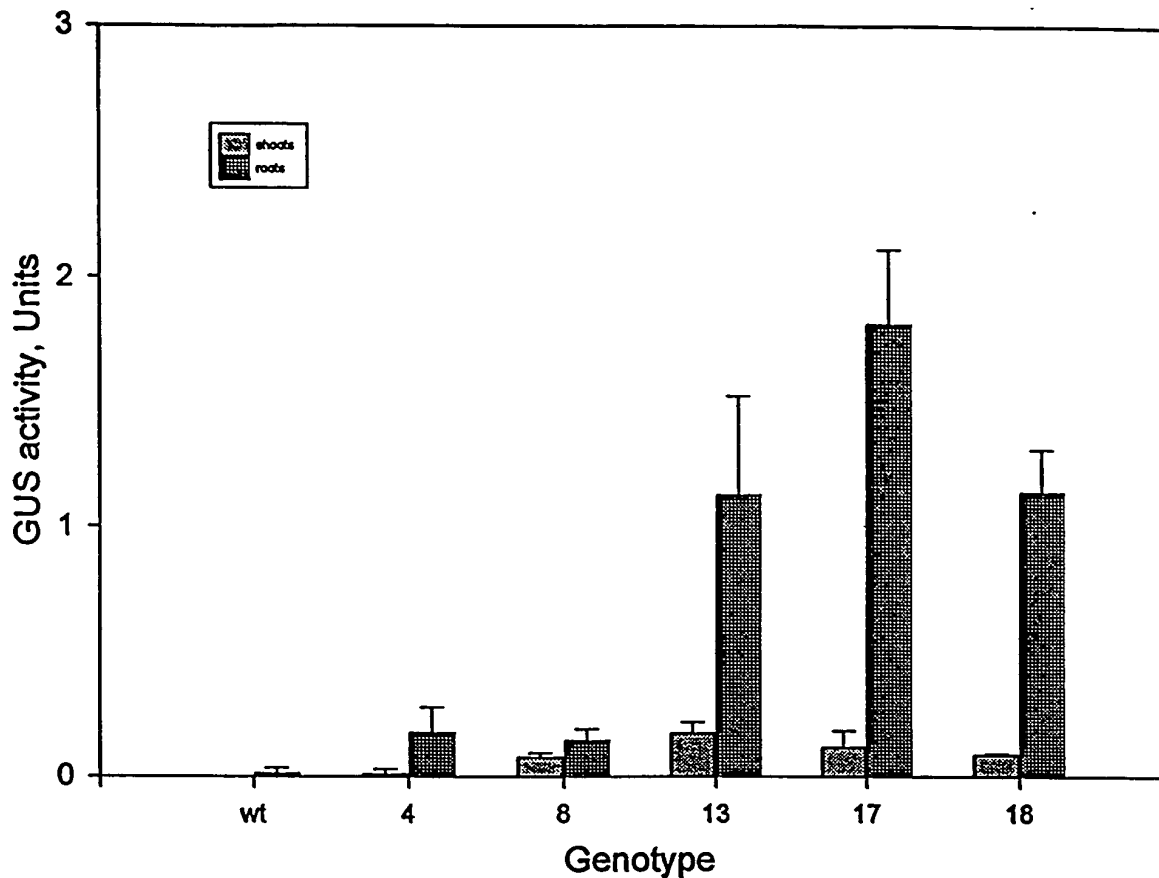


FIGURE 10



GUS activity in btg26/GUS transgenic lines



Root/shoot ratios:

btg26/GUS, line 4	-	19.5
btg26/GUS, line 8	-	1.9
btg26/GUS, line 13	-	6.5
btg26/GUS, line 17	-	15.7
btg26/GUS, line 18	-	13.2

FIGURE 11

PIPE JG14
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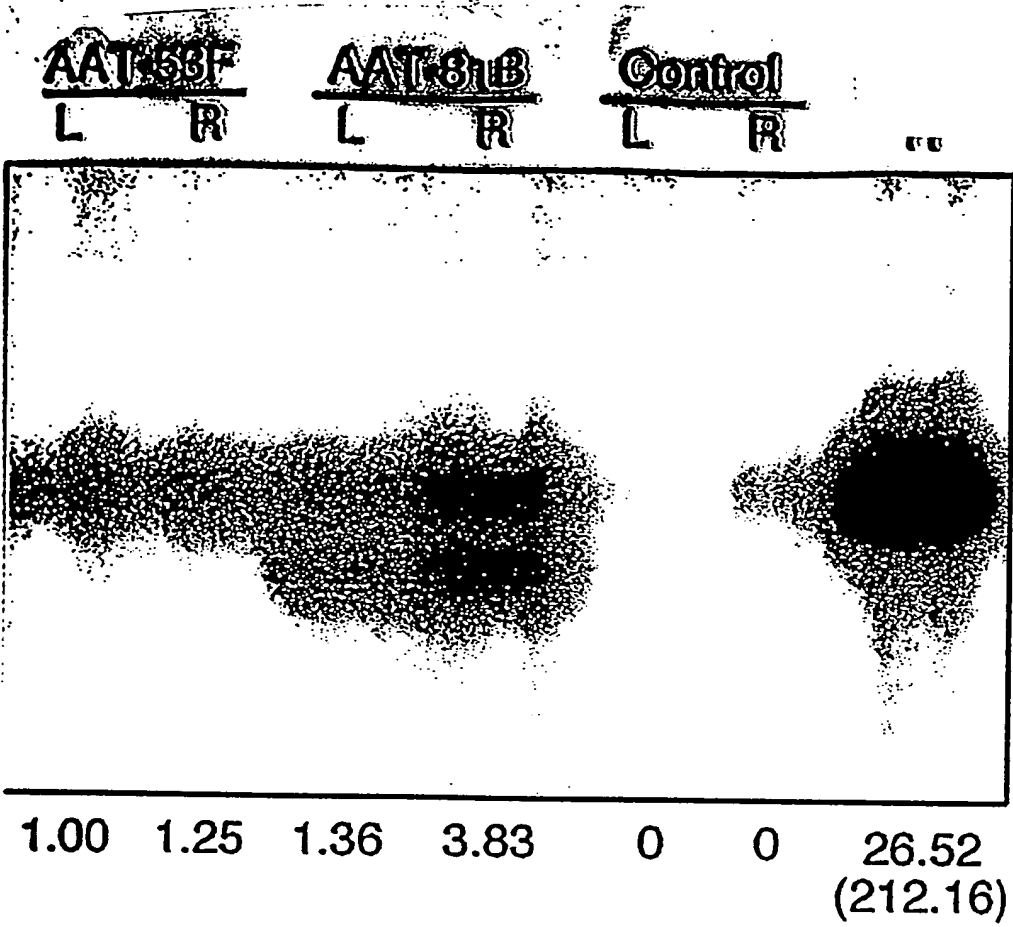


FIGURE 12

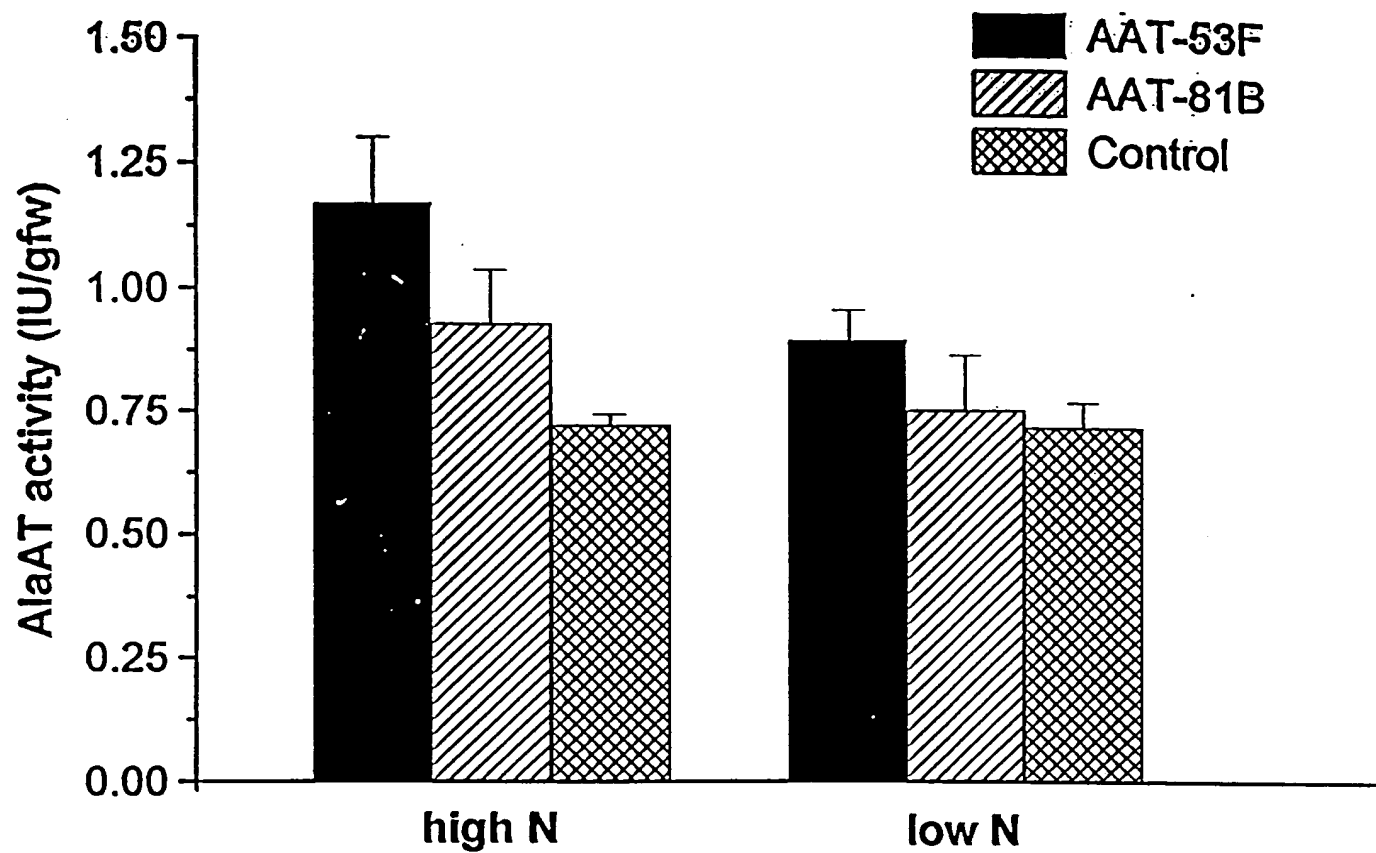
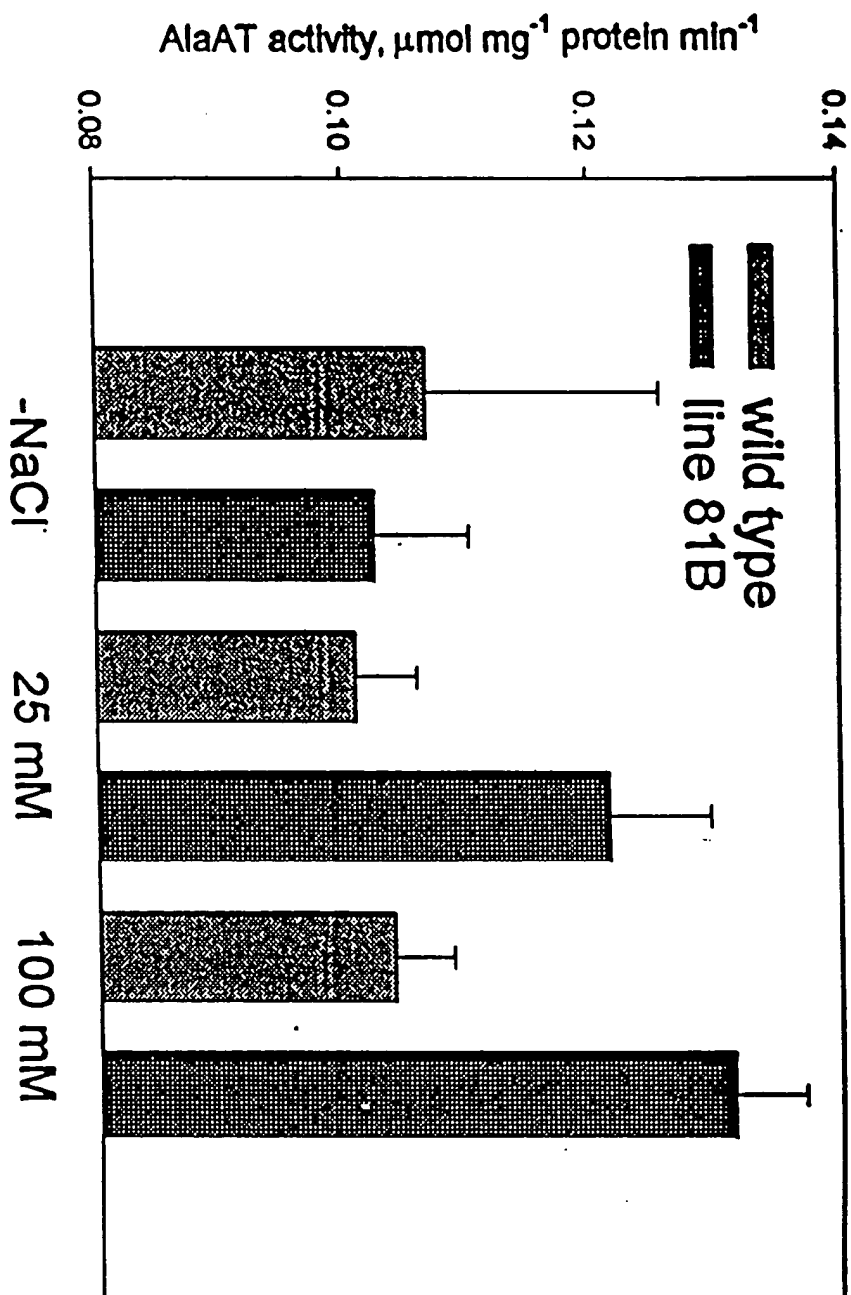
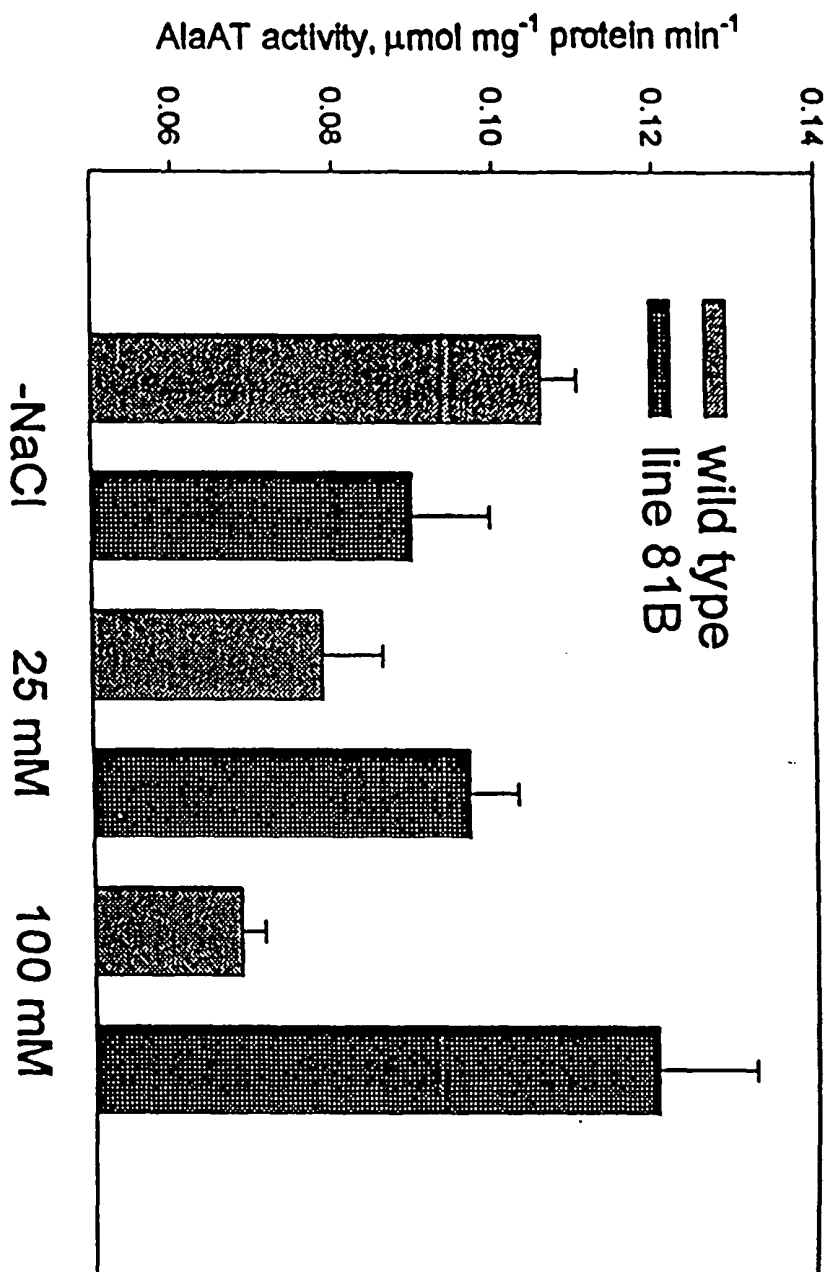


FIGURE 13



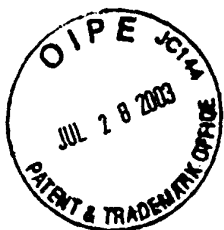
AlaAT activity in shoots of wild type, cv. Westar, and transgenic,
 b1g26/AlaAT line 81B, plants grown hydroponically on 0.5 mM nitrate
 after 36 hours of salt treatment

Figure 14



AlaAT activity in roots of wild type, cv. Westar, and transgenic,
btg26/AlaAT line 81B, plants grown hydroponically on 0.5 mM nitrate
after 36 hours of salt treatment

Figure 15



Effect of salinity on biomass accumulation of wild type, cv. Westar, and transgenic, btg26/AlaAT, line 81B, plants

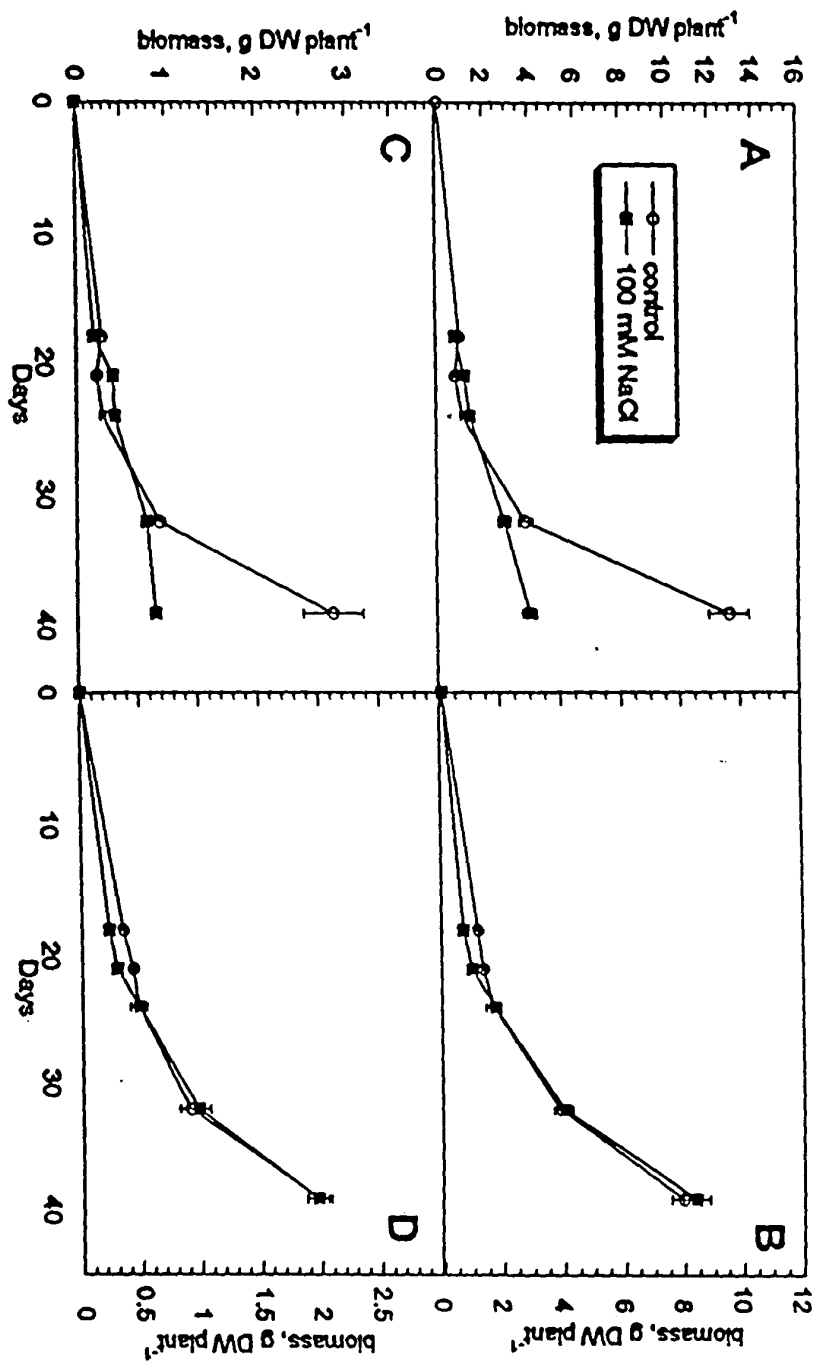


Figure 16